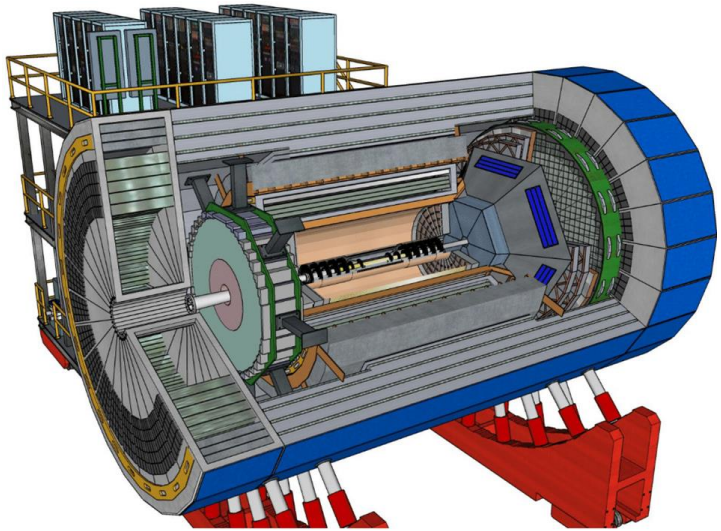
2nd ECCE Simulation Workshop

1st Simulation Workshop: April 2 (https://indico.bnl.gov/event/11112/)

- Event generators & fast simulations
- Fun4All framework and full detector simulations
- Simulation data analysis



Focus of this 2nd workshop:

- Structure of DST simulation outputs
- Detector and event evaluators
- How to build an analysis module for your study
- Hands-on examples of physics analyses workflows

Simulation WG: test productions ongoing

- 1st test production completed !
  - ✓ 3 sets of 1,000,000 events for testing purposes:

Sample	Generator	Beam Parameters	Path	Notes
"Min-Bias"	Pythia6	ep, 10 GeV x 250 GeV	/sphenix/user/cdean/ECCE/DST_files/general/pythia6_ep/	Run using internal Fun4All generator
SIDIS	Pythia6	ep, 18 GeV x 100 GeV	/sphenix/user/cdean/ECCE/DST_files/SIDIS/pythia6/ep_18x100/	EIC-smear tree input
HF & Jets	Pythia6	ep, 10 GeV x 100 GeV	/sphenix/user/cdean/ECCE/DST_files/HFandJets/pythia6/ep_10x100/	EIC-smear tree input

Details at: https://wiki.bnl.gov/eicug/index.php/ECCE_Simulations_Working_Group#Production_Status

Timeline:

- Ongoing: 1M-event productions with events provided by different WGs (for analysis debugging)
- June 15: 1st large simulation production (with few selected detector configurations)
- July 15: 2nd (and last) simulation production (optimized based on the analysis of 1st campaign)

Agenda

2nd ECCE Simulation Workshop

Friday 21 May 2021, 09:00 → 13:00 US/Eastern

09:00 → 09:10	**Computing resources for ECCE** **Speakers**: Cristiano Fanelli (MIT) , David Lawrence (Jefferson Lab) , Joe Osborn (Oak Ridge National Laboratory)	10m
09:20 → 09:40	**Simulation workflow: from MC input samples to output DSTs** **Speaker**: Cameron Dean (LANL)	20m
09:50 → 10:10	**Structure/content of eval trees and DST files** **Speaker**: Dr Jin Huang (Brookhaven National Lab)	20m
10:20 → 10:40	**An example of physics analysis using the evaluators** **Speaker**: Ralf Seidl (RIKEN)	20m
10:50 → 11:20	**Break**	30m
11:20 → 11:40	**How to create/modify and analysis module for your study** **Speaker**: Joe Osborn (Oak Ridge National Laboratory)	20m
11:50 → 12:10	**An example of a physics analysis workflow including the far-forward region** **Speaker**: Wenliang Li (College of William and Mary)	20m
12:20 → 13:00	**General Q&A** **Speakers**: Cameron Dean (LANL) , Chris Pinkenburg (BNL) , Jin Huang (Brookhaven National Lab)	40m

Event will be recorded for future reference